

## 2. PHYSICAL DESCRIPTION OF CORRIDOR

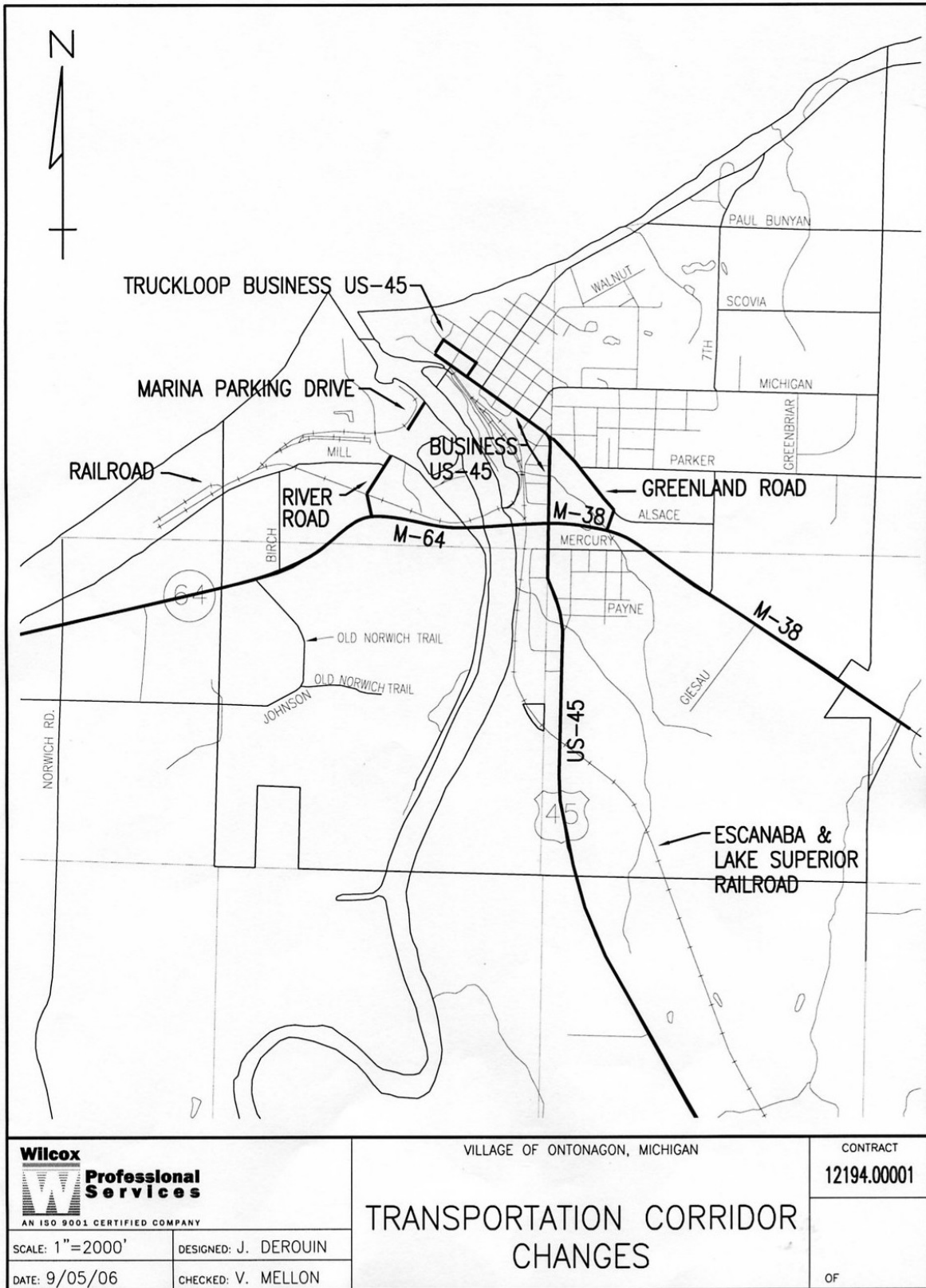
### ***Characteristics of the Existing Roadways***

**M-38:** This portion of the corridor consists of what is now M-38 from the Village limits to the intersection with US-45. Following completion of the new M-64 bridge, M-38 will extend from the eastern Village limits along the existing alignment to Mercury Street, and then will continue about a block north of Mercury Street until it intersects with US-45. The portion of what is now M-38 from Mercury Street to the “five corners” intersection will become Greenland Road, a Village street. The following Table 1 indicates the relationship of old and new designations for this corridor. Map 1 (page 8) also displays the corridor changes.

**Table 1: Roadway Designations Within the Study Corridor**

<b>Old Roadway Designation</b>	<b>New Roadway Designation</b>
M-64 from West Village Limits to just west of E&LS RR	Same
None (new segment)	M-64 from just west of E&LS RR across Ontonagon River to US-45
M-64 from just west of E&LS RR to River Rd.	North River Road
M-64 from River Street to the Ontonagon River	None (Partial removal with remainder to be designated as Marina Parking)
None (new segment)	M-38 from US-45 to existing M-38 near Mercury St.
M-38 from Mercury St. to East Village Limits	Same
M-38 from Mercury St. to US-45 intersection	Greenland Road
None (new segment)	Heard St. from Mercury to M-38
Mercury St. from S. 4 <sup>th</sup> St. to M-38	None (to be removed)
Silver St. from US-45 east one block to dead end	Silver St. from US-45 east two blocks, one-way (eastbound) with T intersection into M-38
US-45 from five corners intersection to Lake St.	Business US-45
Lake St. from River St. to Michigan St.	Business US-45 Truck Loop
Michigan St. from Lake St. to Chippewa St.	Business US-45 Truck Loop
Chippewa St. from Michigan St. to River St.	Business US-45 Truck Loop

**Map 1: Transportation Corridor Changes**



### Corridor Characteristics (continued)

The current alignment of M-38 is a two-lane roadway with paved shoulders, with a speed limit of 45 mph where it enters the Village. The speed limit decreases to 35 mph at approximately Mercury Street, and there is a 25 mph limit at approximately Alsace Street to Parker Street during school hours.



*Photo 1: M-38 from Giesau Drive, showing the driveways for the IGA and Family Dollar stores. A driveway for the Ontonagon County Courthouse is located about 75 feet from the northern entrance to the IGA parking lot and is visible near the left edge of the photo.*

This portion of the corridor is relatively free of access problems, although there are some minor access issues where improvements are recommended. At the entrance to the Family Dollar and IGA stores at the eastern edge of the Village, two driveways about 170 feet apart, access the shared parking lot for these two businesses. Only a short distance beyond the western ingress/egress point for these businesses is a driveway accessing the Ontonagon County Courthouse, which also has a second driveway less than 500 feet to the west. Design issues for this group of driveways include a lack of curb and gutter and flares, which would help define the ingress/egress points and the proximity of the driveways for the IGA/Family Dollar and courthouse. Also at the nearby intersection of 7<sup>th</sup> Street and M-38, near the hospital, somewhat limited visibility affects intersection sight distance in the northwest quadrant.

Where the new alignment of M-38 intersects with the new M-64 and existing US-45, the new alignment of M-38 will be just south of the existing alignment of Silver Street, which accesses four residences and the Redeemer Free Lutheran Church. Silver Street will be maintained as a one-way street (eastbound) in order to provide access to the residences and an exit for the church, rather than creating curb cuts (and conflict points) on the new alignment of M-38. This will help maintain traffic flow on M-38. The new alignment of M-38 will include two through

lanes plus a center-turn lane and additional right-turn lane from the intersection of Silver Street to the US-45 intersection, and traffic on the east-west M-38/M-64 corridor will not stop at US-45. The roadway will have four lanes at this location. The turning lanes will act as a refuge for turning vehicles and facilitate traffic flow by enabling motorists to wait for an appropriate gap without delaying traffic behind them. Maintaining through traffic flow on M-64/M-38 will also prevent traffic backups onto the bridge.

**US-45:** This two-lane roadway enters the Village from the south, and is the northern terminus of a highway running north-south from Mobile, Alabama through Mississippi, Tennessee, Kentucky, Illinois and Wisconsin. Within the Village, US-45 now terminates where it intersects with the current alignment of M-64. Following the construction of the new bridge, US-45 will maintain its existing alignment, and the portion of River Street from Greenland Road (“five corners”) to Lake Street will be designated as “business US-45,” maintaining its status as a state trunk line. A “truck loop” will be developed at the end of River Street, utilizing Lake Street, Michigan Street, and Chippewa Street. The truck loop will need to accommodate delivery trucks for downtown businesses as well as recreational vehicles from the campground which may be traveling through the downtown area on their way to and from the township park located on Houghton Street. Plans call for improvements to the road surface, width and turning radii along the truck loop in order to accommodate this type of traffic.

US-45 has a speed limit of 45 mph where it enters the Village, and the speed limit decreases to 35 mph just north of Chaulk Street. There are relatively few access problems along this portion of the corridor, due to the low-intensity residential uses along the roadway. Closer to the downtown area, churches and a few businesses result in increased traffic during certain times, but the number of access points is limited.



*Photo 2: River Street (now US-45) from near the intersection with M-64. This roadway will become Business US-45.*

Traffic on US-45 will be required to stop at the intersection with M-38/M-64. The intersection will be marked with a stop sign, but will not be signalized. MDOT officials are studying this intersection for possible future signalization. As part of the bridge relocation project, they may move the caution signal from the five corners location to this intersection.

**M-64:** M-64 enters the Village from the west as a two-lane roadway with a speed limit of 45 mph. The current alignment crosses the Ontonagon River and terminates at the intersection of Ontonagon Street (M-64) and River Street (US-45). Following completion of the new bridge, portions of M-64 on both sides of the Ontonagon River from near the Escanaba and Lake Superior railroad tracks to the east side of the Ontonagon River will be removed, including the existing bridge. The new alignment of M-64 will curve to the east before crossing the railroad tracks, and will cross the river approximately one half mile upstream from the current bridge. The new M-64 alignment will terminate at the US-45 intersection near the present intersection with Silver Street, as shown on Map 1 (page 8).

## ***Traffic Counts***

The Michigan Department of Transportation maintains traffic counters at locations throughout the state in order to monitor trends in general and commercial traffic. In the Village of Ontonagon, Annual Average Daily Traffic (AADT) data is collected at four locations: on M-38 east of the US-45 intersection; on M-64 just west of the Ontonagon River bridge and again near the Village limits; and on US-45 near the Village limits. The AADT for these four locations is shown below in Table 2.

**Table 2: Annual Average Daily Traffic, 1996-2004**

<b>Year</b>	<b>M-38</b>	<b>M-64 W. of Bridge</b>	<b>M-64 near Village Limits</b>	<b>US-45</b>
1996	5100	4400	3800	530
1997	5200	4300	3800	540
1998	5400	4500	4000	780
1999	4800	4100	2900	790
2000	4900	6000	4100	790
2001	5300	6000	3100	800
2002	5400	6000	3100	810
2003	4900	6100	2800	800
2004	4900	5600	2800	630

*Source: MDOT, [www.michigan.gov/mdot](http://www.michigan.gov/mdot)*

The traffic counts indicate a relatively low level of traffic. For the sake of comparison, state trunk lines in the UP's larger communities have an AADT of close to 30,000 in heavily traveled areas. As would be expected, traffic is greater near the more densely developed commercial center of the community, and drops off significantly near and beyond the Village limits. Further from the Village, AADT around Rockland, 20 miles south of Ontonagon, is around 600-800; the Silver City area, 15 miles west of Ontonagon, has AADT's of 700-1300, and Mass City, 15 miles east of Ontonagon, has counts of 1,200 to 2,000.

Overall, the trend has been one of generally increasing traffic within the Village, although 2004 showed decreased traffic at all count locations except M-64 near the Village limits, which was unchanged from 2003. Traffic counts for 2005 and 2006, when they become available, will reflect the impact of construction of the new M-64 bridge. Construction projects often serve to divert traffic from an area or onto alternate routes.

The only location to see significant increases in traffic is US-45, where traffic increased sharply between 1997 and 1998. While this highway carries much less traffic than M-38 and M-64, the increase is noteworthy. In 2004, however, the AADT in this area returned to closer to the 1997 level.

## ***Land Use***

Transportation patterns in a community are determined by land use (both current and historical), as well as by physical features such as lakes, rivers, geology and terrain. The land uses in a community not only help determine where transportation corridors are located, but they also help to determine what kind and the level of traffic that occurs. For example, a community with a strong manufacturing base will typically generate more heavy truck traffic, and this traffic may remain fairly consistent throughout the year. An area with a strong tourism base, in the other hand, may generate traffic that consists of passenger vehicles and recreational vehicles, and this traffic may experience strong seasonal fluctuations. Retail areas, churches, schools, etc., also have an effect on local traffic patterns.

In the case of the Village of Ontonagon, the land use pattern is that of a small, rural community with a diverse employment base including manufacturing and with a fairly strong tourism component. The majority of the retail and other commercial uses are concentrated in the downtown area, with clusters of retail along the highway corridors on the outskirts of town. Traffic levels are relatively low, but terrain and the presence of Lake Superior and the Ontonagon River strongly influence the location of streets and highways.

From the west, along the existing M-64, the land use pattern consists of a retail/commercial cluster containing a gas station, car wash, etc. on the north side of M-64 near the village limits, and access to an industrial area to the south of M-64. Ontonagon County Transit is located in the industrial park, and snowmobile races are held in the park once a year, sponsored by a local snowmobile club. Smurfit-Stone Container Corporation, a paper mill that manufactures corrugated medium, is located north of M-64 at the mouth of the Ontonagon River. Employing about 300 people, the mill is a generator of both vehicular and pedestrian employee traffic as well as truck and rail traffic to transport raw materials and product to and from the plant. The White Pine power plant and Smurfit Stone Container Corporation both receive coal from the



dock located adjacent to EDC dock at the mouth of the Ontonagon River; the coal is transported from Ontonagon to White Pine via trucking. The Escanaba and Lake Superior Railroad also transports material to Smurfit Stone. There is also a community park south of M-64 along the river and an RV park and a marina located a short distance upriver.

West of the Ontonagon River, US-45 enters the village from the south and travels through a residential area for most of its length before intersecting with M-38. This residential area is very rural in character near the southern Village limits, with homes and driveways widely spaced. Closer to M-38 the density of development increases, with traffic generators such as churches, becoming more frequent. Commercial businesses occur on US-45 in the block leading up to the intersection with M-38.



*Photo 3: Typical residential area along US-45.*

River Street, which is currently also designated as US-45 until it intersects with M-64, will become a business spur of US-45. The primary uses along this section of state trunk line are retail and service businesses; these types of uses extend a block or so in both directions off of this roadway.

M-38 enters the village from the southeast. Near the Village limits, a grocery store and discount store, as well as the Ontonagon County Courthouse, generate commercial and service-related traffic. South of the highway, Giesau Drive provides access to the Renaissance Zone, an industrial area with approximately 50 acres of developable land. Residential uses dominate the remainder of the M-38 corridor until it nears the intersection with US-45, with the exception of the elementary and high school, which is located adjacent to M-38. Gas stations and retail uses east of the intersection with US-45 signal the beginning of the downtown area business district.

Since the study area encompasses 1,000 feet on either side of the centerline of all three state trunk lines, side streets and their accompanying land uses are included in this plan. Although most of the access management concerns identified in this process are located on or very close to the state trunk lines, several traffic generators are located within the 1,000-foot study corridor, or even beyond its limits. These traffic generators are identified in Section 3, and even if they are not located in the study area, have the potential to influence traffic patterns by adding significant amounts of traffic to state trunk lines or major streets. In general, however, the area that is not immediately adjacent to the state trunk lines is generally low-intensity residential development.

The new M-64 corridor is a desirable location for future development. Implementation of strengthened site plan review language including coordinated site plan review before such development takes place offers a unique opportunity to maintain a high degree of safety and capacity along the highway corridor.

## ***Zoning***

The existing zoning ordinance for the Village was adopted in 1975, and has been amended periodically since that time.

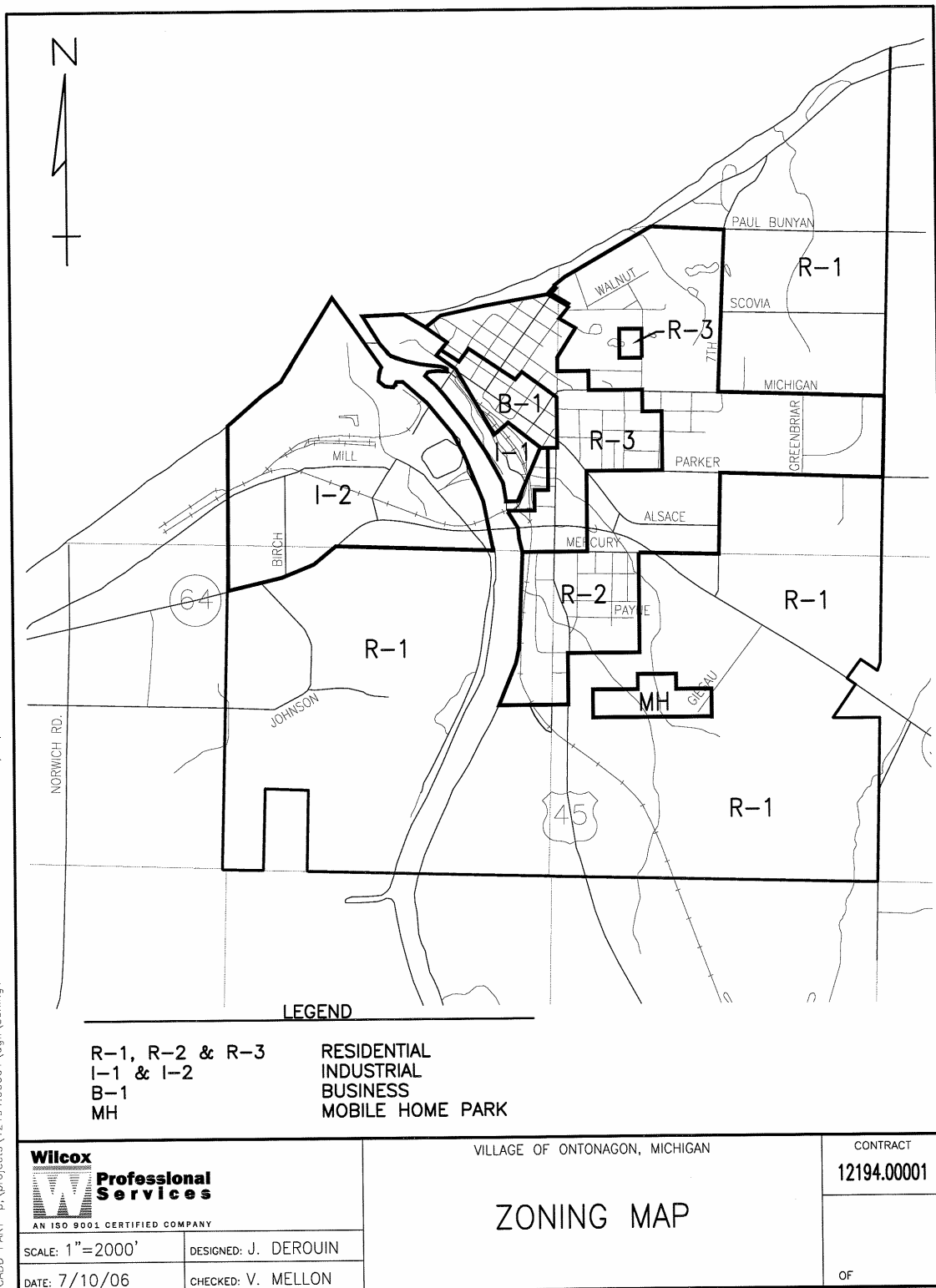
The ordinance defines zoning districts within the Village, along with language regulating the uses within these districts. From an access management perspective, the provisions of most interest are those which deal with lot size and width, setbacks, permitted uses, and site plan review.

The study corridor contains a mix of residential, business and industrial zoning. Currently, the land north of the current alignment of M-64 is zoned industrial (I-2) from the Village limits to the Ontonagon River, including the Smurfit-Stone paper mill and the various commercial uses along the highway. South of M-64 the land is zoned residential (R-1) from the Village limits to a point across from Superior Way. Along US-45, residential zoning predominates, including R-1 nearest the southern limits of the Village, then R-2 and R-3 closer to the downtown area. The downtown area along US-45 is zoned business (B-1). The current alignment of M-38 is surrounded by residential areas from the Village limits to the intersection with US-45. Map 2 (page 15), depicts the existing zoning districts in the Village.

The new alignment of M-64 and M-38 will travel through the I-2 industrial district on the west side of the Ontonagon River and through R-2 and R-3 residential districts on the east side of the river.



## Map 2: Zoning Map



### Existing Zoning Regulations

Minimum lot widths along the corridor range from 100 feet in the R-1 district to no required minimum in the B-1, I-1 and I-2 districts. The R-2 and R-3 districts require minimum lot widths of 75 feet and 50 feet, respectively. **If fully “built out,” or if the corridor was fully developed at the minimum lot width under the current regulations, driveways could occur with very little spacing between them.**

Setbacks from front lot lines affect clear vision areas and availability of snow storage, as well as the overall appearance of a neighborhood. The B-1, I-1 and I-2 districts have no minimum setback; a zero setback is common in central business districts, such as River Street, where buildings are often built up to the sidewalk. Front setbacks in the residential districts are 30 to 35 feet.

Permitted uses in the residential districts range from the single- and two-family residences which are the primary use permitted in the R-1 district to the more intensive development permitted in R-3, which include multiple-family dwellings of all sizes, and funeral homes. The B-1 general business district permits a variety of retail and service businesses as well as multiple-family dwellings, in what is primarily a typical central business district setting. The I-1 district allows the business uses permitted in the B-1 district, as well as some manufacturing uses. In the I-2 district, all these uses are permitted along with more intense industrial uses such as paper mills, asphalt plants, etc. Access management is primarily concerned with the potential for traffic generation associated with these uses.

The current zoning ordinance contains minimal requirements for site plan review. Site plan review is one of the most useful tools a community has at its disposal when enforcing zoning. A properly prepared site plan, when reviewed by local authorities and mutually agreed to by the developer and the local unit of government, provides a clear record of what is to be built and what is permitted. In the case of access management, a coordinated site plan review process allows all permitting agencies to review a site plan simultaneously, streamlining the process for the applicant and insuring a consistent response from all agencies.